

**REMARKS**

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 3, 4, 10, 12 and 13 are amended and new claims 19 and 20 are added by the present amendment. Claims 1-20 are pending in the present application.

**Objection to the Title**

In the outstanding Office Action, the Title was objected to. A new Title is added which more clearly indicates the invention to which the claims are directed. Accordingly, it is respectfully requested this objection be withdrawn.

**Rejection under 35 USC § 112**

Claims 1-18 were rejected under 35 USC § 112, first paragraph. In light of the comments noted in the outstanding Office Action, independent claims 1 and 10 are amended to recite "time information on a time when said information is recorded," and claims 3, 4, 12 and 13 are amended to provide antecedent basis for the term "FAT area."

Accordingly, it is respectfully requested this rejection be withdrawn.

**Rejection under 35 USC § 102**

Claims 1-3, 5, 10-12 and 14 were rejected under 35 USC § 102(e) as unpatentable over U.S. Patent Application Publication Number 2001/0015944 A1 to Takahashi (herein "Takahashi"). This rejection is respectfully traversed.

Independent claims 1 and 10 are amended to recite "management information including time information on a time when said information is recorded, index information which can be assigned to a recording unit, and a backward pointer for connecting recording units in a backward direction," support for which is found in the originally filed specification at least at page 7, line 2 to page 8, line 1.

In a non-limiting example, in the present application, each FAT entry tag includes a pointer and time information. As recording takes place, the pointer and time information are recorded simultaneously in a FAT entry tag for each cluster. To perform a time search, the FAT entries are traced according to pointers of the FAT entry tags from a pointer to the leading FAT entry tag described in the DIR entry tag as the starting point. Each time information is compared with the time being sought, to find the cluster corresponding to the search (see the specification at page 7, lines 2-34).

As an advantage, even when data is recorded using a variable bit rate, an accurate time search can be performed (see the specification at page 7, line 34 to page 8, line 1).

Further, amended independent claim 1 recites storing management information including "time information on a time when said information is recorded," and "a backward pointer for connecting recording units in a backward direction." Amended independent claim 10 recites similar features, support for which is found in the originally filed specification at least in FIGS. 7 and 8 and page 9, lines 21-24 and 30-32.

In contrast, Takahashi only discusses recording a single recording time for an entire file, without a recording time for each cluster or subset of a file at page 3, paragraph 74. Takahashi does not teach or suggest storing "management information including time information on a time when said information is recorded," as recited in independent claims 1 and 10. Takahashi also only discusses "a fixed recording rate (that is, a fixed encoding bit rate)" for recording an amount of data "for a one-minute period of time" at page 4, paragraphs 82 and 83.

Moreover, in the present application, Figures 7 and 8 show a FAT area 34 including a backward pointer 14D, which is added to each FAT entry tag of the FAT area 24. During recording, the backward pointer 14D is written into each FAT entry tag corresponding to each cluster (see the specification at page 9, lines 21-24 and lines 30-32).

As an advantage, it is possible to playback by specifying a time or time interval quickly by tracing the backward pointers 14D during backward playback (see the specification at page 10, lines 29-36).

In further contrast, Takahashi only discusses that a block of sectors is reserved to accommodate a large consecutive block for recording units of one minute at page 4, paragraph 79. Such a large consecutive block, and the use of one-minute recording units, are incompatible with backward playback.

Accordingly, it is respectfully submitted Takahashi does not discuss or suggest at least storing "management information including time information on a time when said information is recorded...and a backward pointer for connecting recording units in a backward direction," as recited in independent claims 1 and 10.

#### **Rejections under 35 USC § 103**

Claims 4 and 13 were rejected under 35 USC § 103(a) as unpatentable over Takahashi and Japanese Laid Open Publication No. 7-141837 to Nakamura (herein "Nakamura"). This rejection is also respectfully traversed.

Claims 4 and 13 depend on claims 1 and 10, respectively, which as discussed are believed to patentably distinguish over Takahashi. Moreover, it is respectfully submitted there is no motivation to combine Takahashi and Nakamura at least because Takahashi only discusses recording consecutive blocks of data for one-minute periods of recording time (see page 4, paragraphs 82, 83 and 85 of Takahashi). Because the length of recording time in Takahashi is divided into one-minute periods, there would be no motivation to include backward pointers to affect reverse playback, as recited in pending independent claims 1 and 10, and therefore no motivation is suggested for combining Takahashi and Nakamura.

Further, combining backward pointers such as discussed in Nakamura with the system of Takahashi would violate the principle of at least Takahashi, which recites finding free areas "by sequentially scanning the left column of the FAT starting from sector 000 and ending at a sector with the next sector thereof on the right column having a blank ("000") sector number. The size of a free area is found by counting the numbers of physically consecutive sectors included in the free area."

Accordingly, it is respectfully submitted claims 4 and 13 patentably distinguish over Takahashi and Nakamura for this additional reason.

Claims 8 and 17 were rejected under 35 USC § 103(a) as unpatentable over Takahashi and U.S. patent number 6,553,180 B1 to Kikuchi et al (herein "Kikuchi"); and claims 9 and 18 were rejected under 35 USC § 103(a) as unpatentable over Takahashi and U.S. patent number 5,999,933 A to Mehta (herein "Mehta"). These rejections are respectfully traversed.

Claims 8 and 9 depend on amended independent claim 1, and claims 9 and 18 depend on amended independent claim 10, respectively, which as discussed are believed to patentably distinguish over Takahashi. Moreover, Kikuchi only discusses playback of video together with a thumbnail extracted from the video, and Mehta only discusses analyzing memory dumps collected into logical tables. It is respectfully submitted Kikuchi and Mehta do not overcome the deficiencies noted with respect to Takahashi.

Accordingly, it is respectfully submitted amended independent claims 1 and 10 and claims 8, 9, 17 and 18 depending therefrom also patentably distinguish over Takahashi, Kikuchi and Mehta.

### New Claims

In addition, new claims 19 and 20 are added to set forth the invention in a varying scope. New claim 19 is a method claim similar to claim 10, but includes features of recording information and storing information in discrete steps, support for which is found in the originally filed specification at least at page 6, lines 24-31 and page 7, lines 2-35. New claim 20 depends on claim 19, and recites performing recording and storing in sequence, support for which is found in the originally filed specification at least at page 7, lines 2-35. New claims 19 and 20 are believed to be allowable at least for similar reasons as discussed regarding independent claims 1 and 10.

### Conclusion

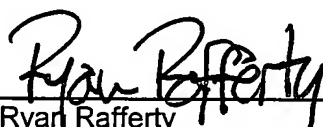
Consequently, in light of the above discussion and in view of the present amendment, this application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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